



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/541,072	05/15/2006	Valerie Lejeune	3888-0110PUS1	4138

2292 7590 03/18/2008  
BIRCH STEWART KOLASCH & BIRCH  
PO BOX 747  
FALLS CHURCH, VA 22040-0747

EXAMINER
----------

ROBINSON, ELIZABETH A

ART UNIT	PAPER NUMBER
----------	--------------

1794

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

03/18/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/541,072	<b>Applicant(s)</b> LEJEUNE, VALERIE	
	<b>Examiner</b> Elizabeth Robinson	<b>Art Unit</b> 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 December 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 16-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 16-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-6 and 16-19 are currently pending.

### ***Election/Restrictions***

Applicant's election of Group I, claims 1-6 in the reply filed on December 10, 2007 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

### ***Claim Rejections - 35 USC § 102***

Claims 1, 4 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Miyamoto et al. (US 6,120,590).

Regarding claim 1, Miyamoto et al. (Column 18, lines 37-44) teaches a pigment ink that can provide drawn lines (a coating at the surface) having a metallic lustrous color (iridescent appearance) on a writing paper (paper is a cellulose fiber-based material). The ink composition can also be used for stamps or printers (Column 18, lines 37-44). This provides a sheet with an iridescent appearance. The ink layer is comprised of a metal powder pigment (Column 3, lines 37-43) that can provide a polychromatic color (iridescent pigment) and hollow plastic spheres (Column 9, lines 32-

35). The spheres have a size of 200 nm or more and are thus microspheres (Column 6, lines 47-56).

Regarding claim 4, Miyamoto (Example 2, Column 11, lines 48-65) teaches that the hollow particles have an average particle diameter of 550 nm (0.55  $\mu\text{m}$ ). This size meets the limitations of the instant claim.

Regarding claim 16, a particle size of 0.55  $\mu\text{m}$  is approximately 0.6  $\mu\text{m}$  when rounded to one significant figure.

### ***Claim Rejections - 35 USC § 103***

Claims 1, 4, 6, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Popat et al. (US 5,407,718), in view of Miyamoto et al.

Regarding claim 1, Popat (Column 1, lines 6-9) teaches a substantially transparent paper label. Popat (Column 4, lines 3-17) further teaches that the paper for the label can be a natural tracing paper. The labels can be preprinted with a pattern for a decorative effect (Column 5, lines 43-52). Popat does not explicitly state the composition of the ink used to provide this pattern. As stated above, Miyamoto teaches an ink composition that meets the coating composition limitations for claim 1 and can be used for printers. It would be obvious to one of ordinary skill in the art to use the ink of Miyamoto, as the ink for providing a decorative pattern for Popat, in order to provide a label with an iridescent pattern.

Regarding claim 4, Miyamoto (Example 2, Column 11, lines 48-65) teaches that the hollow particles have an average particle diameter of 550 nm (0.55  $\mu\text{m}$ ). This size meets the limitations of the instant claim.

Regarding claims 6 and 17, a thin film of the coating of Miyamoto should have some degree of translucency. Alternately, a decorative pattern would not necessarily coat the entire substrate. Those portions of the substrate not coated would be transparent, since the base label is transparent.

Regarding claim 16, a particle size of 0.55  $\mu\text{m}$  is approximately 0.6  $\mu\text{m}$  when rounded to one significant figure.

Claims 1, 2, 6 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carroll et al. (US 5,934,290), in view of Mougin (WO/2001/89470). The examiner is using US 2002/0115780 as the English language equivalent of the World document.

Regarding claim 1, Carroll (Abstract) teaches an acrylic (plastic) artificial fingernail (substrate) that has a smooth transparent look. After the artificial fingernail is formed, it can receive nail polish (coating) in the conventional way (Column 2, lines 32-38). Carroll does not disclose the composition of the nail polish. Mougin (Paragraph 149) teaches a nail varnish (polish) that shows good resistance to aging, does not become worn and remains glossy. It would be obvious to one of ordinary skill in the art to use the nail polish of Mougin, as the nail polish of Carroll, in order to have a nail polish that remains glossy and does not detract from the smooth appearance of the Carroll nail. Mougin teaches that the varnish can comprise hollow polymer

Art Unit: 1794

microspheres (Paragraph 124) and nacre (iridescent) pigments (Paragraph 126). The binder for the varnish (Paragraph 148) is ethyl acetate and an acrylate copolymer, which would be colorless. Thus with iridescent pigments, the sheet would be inherently iridescent in appearance.

Regarding claim 2, Mougín (Paragraph 126) teaches that the iridescent pigment can be mica coated with titanium oxide.

Regarding claim 6, as stated above, the nail varnish is coated on an artificial nail that is transparent. The binder is colorless, and the other ingredients (titanium oxide coated mica and hollow plastic microspheres) are the same as in the instant application. Thus, the sheet would be transparent or translucent.

Regarding claim 19, Carroll (Column 4, lines 36-59) teaches that the acrylic material is formed between the nail tip and a shaping form and that this forms the acrylic material into a uniform layer (film).

Claims 1-5 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al. (US 6,242,047), in view of Linton (US 3,087,828).

Regarding claim 1, Johnson (Column 2, lines 1-4) teaches a coated paper with high gloss. The coating composition can comprise standard coating pigments and plastic particles. The plastic particles are preferably hollow plastic microspheres (Column 2, lines 62-67). Johnson does not teach an iridescent pigment. Linton (column 2, lines 43-53) teaches a nacreous (iridescent) flake pigment. These pigment flakes can be used in compositions such as paints or inks to which they impart

Art Unit: 1794

decorative effects (Column 11, lines 54-64). They can be used in admixtures with conventional pigments and still provide a pronounced nacreous character (iridescent appearance) (Column 11, lines 22-28). It would be obvious to one of ordinary skill in the art to add the iridescent pigment of Linton, as a pigment of Johnson, in order to obtain a paper with an iridescent decorative effect.

Regarding claim 2, Linton (Column 5, lines 18-21) teaches that the flake pigment is preferable mica coated with titanium oxide.

Regarding claims 3 and 4, Johnson (Column 2, line 62 through Column 3, line 5) teaches that the hollow plastic sphere has a particle size of up to 1.0 micron and is selected from the group consisting of polystyrene, acrylics and methacrylates. The example hollow microsphere is Rohm and Haas HP 1055 (Column 3, lines 25-28). As evidenced by Velpari et al. (US 2002/0058449) these hollow spheres are styrene acrylic.

Regarding claim 5, Johnson (Table 1 and Example 1, Column 3) teaches that the gloss of calendared sheets is 84 or greater. While these sheets did not have the mica particles, due to the high gloss values given, the sheet would either inherently meet the gloss level of the instant claim or alternately, Johnson teaches that increasing the levels of plastic pigment increases the gloss level. It would be obvious to one of ordinary skill in the art to adjust the amount of plastic pigment in the coating to achieve a desired gloss level.

Regarding claim 18, Johnson (Column 2, lines 5-13) teaches that the paper is calendared after it is coated. At this point, the coating layer is a calendared layer.

***Response to Arguments***

Applicant's arguments filed December 10, 2007 have been fully considered but they are not persuasive.

Regarding the Miyamoto et al. reference, Applicant argues that an ink line on a piece of paper is not a coating. There is nothing in the current claims that requires the coating to cover the entire surface of the substrate. Further, Applicant argues that the hollow resin emulsion particles are not microspheres. While the line citation for the particle size was inadvertently omitted from the previous Office Action, the size definition was included and was contained within the reference. The line and column citation was added to this Office Action to clarify that the particles are microparticles.

Regarding the Mougin reference, Applicant argues that the microspheres are used as fillers and this makes the composition different from that of the instant application. However, all that is required by claim 1 is that the particles are present, which they are, and thus, the coating composition of Mougin meets the coating composition limitations of claim 1. Regarding arguments about the substrate, due to amendments to the claims, an additional reference for the substrate was required. Thus, the standalone 35 U.S.C. 103(a) rejections over Mougin from the August 9, 2007 Office Action are withdrawn.

Regarding the Johnson et al. reference, Applicant argues that the pigment is added to the paper of Johnson. However, instead, as was stated in the August 9, 2007 Office Action and repeated here, the pigment is added to the coating composition. Applicant argues that the paper of Johnson is not calendared after the paper is coated,



Art Unit: 1794

however, as stated above in the 35 U.S.C. 103 rejections, it is calendared as the final step. Applicant argues that the paper of Johnson with the pigment of Linton added to the coating would not produce a paper that has the advantages of the paper of the instant application. However, Applicant provides no evidence that this is the case or any indication of what advantages these would be.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Due to amendments to the claims, the 35 U.S.C. 112 rejections from the August 9, 2007 Office Action are withdrawn.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth Robinson whose telephone number is (571)272-7129. The examiner can normally be reached on Monday- Friday 8 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ear  
/E. R./  
Examiner, Art Unit 1794

/Carol Chaney/  
Supervisory Patent Examiner, Art Unit 1794